



# Water Quality Plan 2014

**DRAFT**  
8.4.2014



Environmental Health Administration  
Healthy People • Healthy Communities • Healthy Islands

## Hawaii Department of Health **Water Quality Plan Update**

### 3<sup>rd</sup> Annual Joint Government Water Conference

Kauai ~ August 4, 2015  
Oahu ~ August 6, 2015  
Kona ~ August 11, 2015  
Hilo ~ August 13, 2015  
Maui ~ August 18, 2015

# Presentation Agenda

- **Water Quality Plan Outline**
- **Proposed Schedule to Update the Water Quality Plan**



# Water Quality Plan Outline

- **Section I: Background**
  - Hawaii Water Plan
  - Statewide Framework for Updating the Hawaii Water Plan
- **Section II: Water Quality Programs and Initiatives**
  - Ground Water Quality
  - Surface Water Quality
  - Drinking Water and Clean Water State Revolving Funds
  - Challenges
- **Section III: Supporting DOH Water Quality Work**
- **Section IV-VII: Relevant Statutes and Rules; Information Sources; Organization Charts; and Water Quality Maps**



# Water Quality Plan Outline

- **Section I: Background**
  - Hawaii Water Plan
  - Statewide Framework for Updating the Hawaii Water Plan





# Water Quality Plan Outline

- **Section II: Water Quality Programs and Initiatives**
  - Ground Water Quality
  - Surface Water Quality
  - Drinking Water and Clean Water State Revolving Funds
  - Challenges



# Ground Water Quality

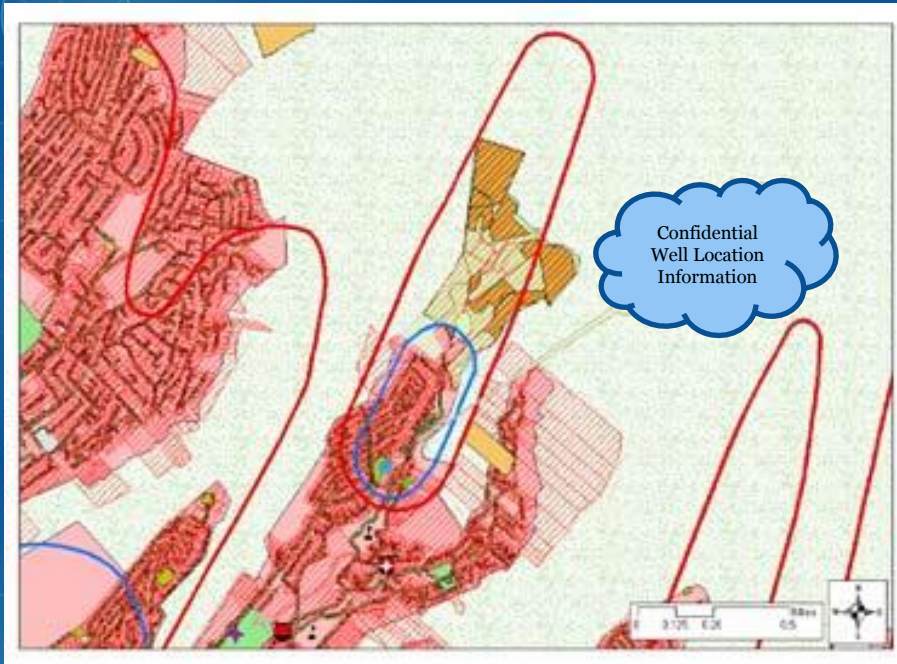
## Source Water Assessment and Protection (SWAP) Program

### Goals:

- Assess the susceptibility of public drinking water sources to contamination;
- Protect public drinking water sources from contamination; and
- Use source water assessment information to meet drinking water requirements.

### Proposed Actions:

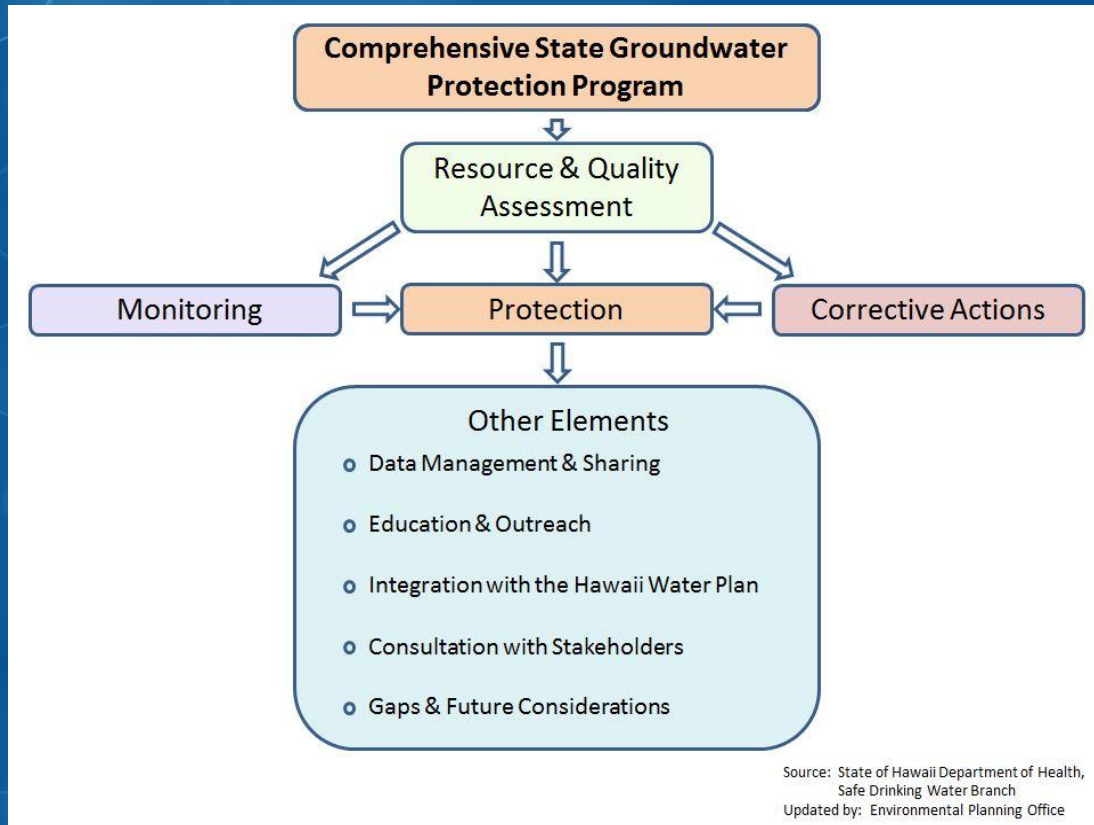
- Assess all existing and proposed drinking water sources;
- Create state and local source water protection workgroups; and
- Redevelop and implement the Wellhead Protection Financial Assistance Program.



<http://health.hawaii.gov/sdwb/swap/>



# Comprehensive State Groundwater Protection Program



<http://health.hawaii.gov/sdwb/groundwater-protection-program/>

## Goals:

- Establish a mechanism for better understanding of relationships between ground water quantity and quality concerns;
- Demonstrate the State's proactive approach to ground water protection, justifying increased funding for program development & additional flexibility from the EPA and other federal agencies; and
- Improve public understanding of ground water protection concerns within the State, and provide a broader context for public participation.

## Proposed Actions:

- Establish specific ground water protection goals to guide the relevant federal, state, and local programs operating within the State; and
- Establish priorities to guide relevant federal, state, and local programs and activities.





# Underground Injection Control

## Goal:

- Reduce the number of unpermitted UIC well facilities
- Assure proper abandonment of UIC wells

## Proposed Action:

- Improve the UIC database system
- Continue to utilize and improve the Environmental Health Administration online e-Permitting System

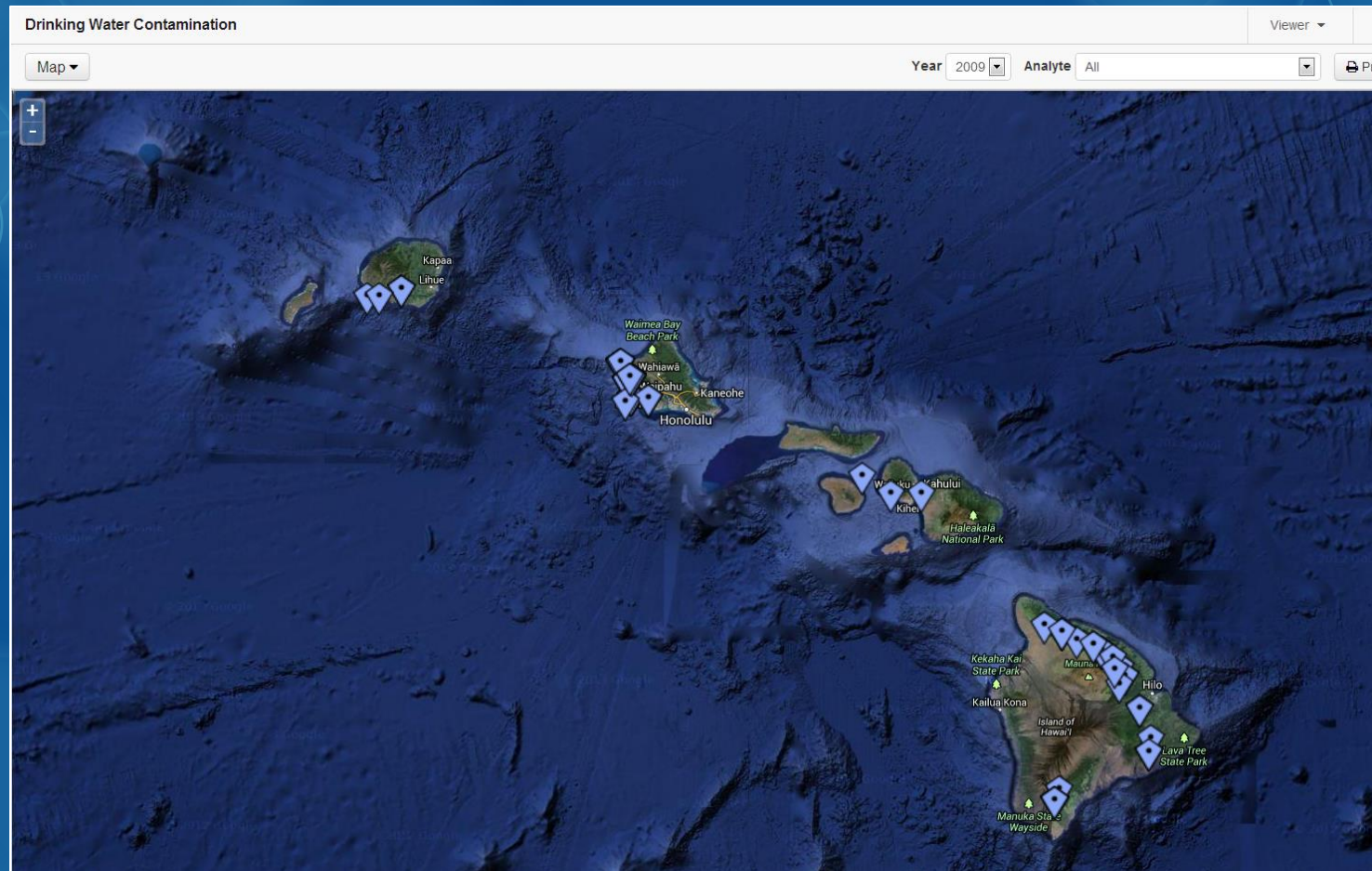


<http://health.hawaii.gov/sdwb/underground-injection-control-program/>





# Groundwater Contamination Viewer



<https://eha-cloud.doh.hawaii.gov>



# Surface Water Quality

## Water Quality Standards

**Goals:** The goal of the WQS Program is to develop scientifically-based WQS that:

- (a) meet federal requirements;
- (b) specify the uses to be protected in State waters; and
- (c) provide appropriate criteria and methods for evaluating the attainment of these protected uses.

### **Current Action:**

- The Clean Water Act requires the State to review WQS every 3 years. The revisions to Hawaii Administrative Rules, Chapter 11-54 became effective on November 15, 2014. Implementation has already begun.





# Monitoring Program



<http://emdweb.doh.hawaii.gov/cwb/wqd/viewer/>

## Goals:

- Monitor surface waters of the State;
- Develop and implement monitoring tools and methodologies;
- Protect Hawaii's aquatic and marine resources; and
- Protect Hawaii's water recreational community.

## Proposed Actions:

- Partnership with USGS to conduct surveys of endocrine active compounds in smallmouth bass to determine existence of chemical contaminants (herbicides, pharmaceutical, and biogenic hormones).
- Partnership with USGS to deploy five Semipermeable Membrane Devices in West Maui to determine existence of pollutant sources and levels in different locations.





## Goals:

- Prevent environmental degradation due to nonpoint source pollution;
- Increase the amount of resources devoted to the control of polluted runoff and focus on collaborative efforts to utilize limited resources; and
- Provide outreach and education to the community in partnership with other agencies.

## Actions:

- Increase the amount of funding devoted to the control of polluted runoff through best management practices;
- Obtain federal approval of Coastal Zone Nonpoint Pollution Control Program.
- Issue Request for Proposals for the Watershed Implementation Projects on an annual basis

# Polluted Runoff Control



<http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/polluted-runoff-control-program/>



# Total Maximum Daily Loads



<http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/integrated-report-and-total-maximum-daily-loads/>

## Goals:

- Quantitatively assess watershed-scale water quality problems, contributing sources, and pollutant load reductions.
- Provide an analytical basis for implementing pollution controls.
- Provide assistance with identifying restoration projects to improve water quality and protect public and environmental health.

## Proposed Actions:

- Incorporate CWB program elements (beach and surface water monitoring, polluted runoff control, NPDES permits, etc.) into the TMDL process.
- Collaborate with the counties and other state agencies to prioritize watersheds for restoration efforts and support stakeholder stewardship of watershed resources.





# National Pollutant Discharge Elimination System (NPDES) Program

## Goals:

- Regulate point source discharges through permitting and enforcement.

## Proposed Actions:

- CWB is planning to implement a statewide MS4\* and stormwater system initiative to encourage counties without MS4 permits to implement stormwater controls.
  - Would include providing financial and technical assistance to implement best management practices (BMPs) and monitoring.



<http://health.hawaii.gov/cwb/>

\* MS4 = Municipal Separate Storm Sewer System





# Revising Recycled Water Guidelines

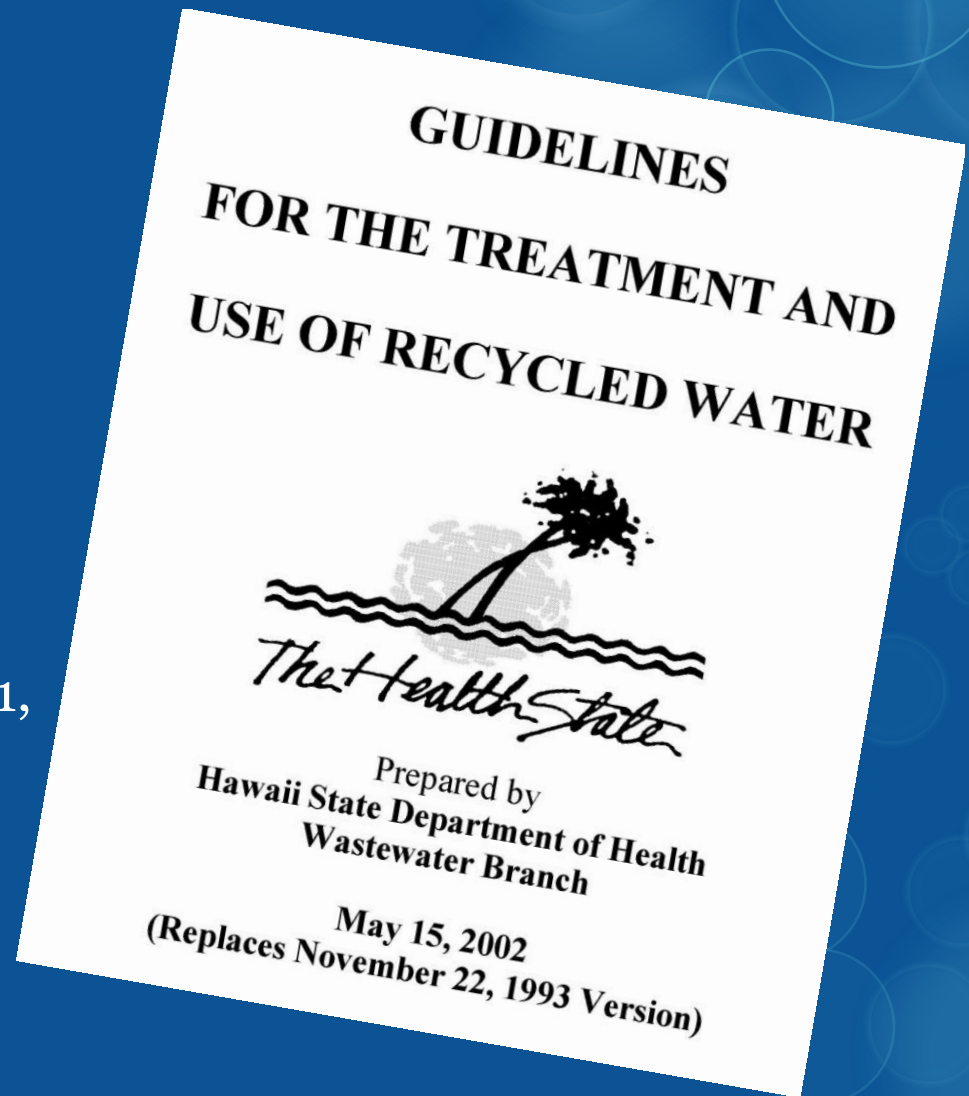
- **Goals:**

- Increase water reuse statewide.

- **Proposed Actions:**

- Complete revisions to the Guidelines by December 31, 2015.

<http://health.hawaii.gov/wastewater/files/2013/06/reuse-final.pdf>



# Upgrading and Eliminating Cesspools

## Goal:

- Eliminate cesspool pollution.

## Current Action:

Update HAR, Chapter 11-62 to:

- Prohibit the construction of new cesspools.
- Implement the temporary income tax credit for the cost of upgrading or converting a qualified cesspool (HB1140 HD1 SD2 CD1 was signed into law on June 12, 2015, as Act 120 affecting Hawaii Revised Statutes, Chapter 235).



<http://health.hawaii.gov/wastewater/>



# Clean Water State Revolving Fund

New UV Banks at  
West Maui  
Recycled Water –  
Phase 1 – UV  
Expansion  
Lahaina  
Treatment Plant,  
Maui  
\$10,946,000  
CWSRF Project



- \$675 million in low-interest loans provided since 1988
- Loans provided to the Counties for construction of publicly-owned wastewater treatment facility infrastructure.
- The current interest rate is 1%.

| SFY  | # Final Loans Agreements Executed | \$ Committed             |
|------|-----------------------------------|--------------------------|
| 2014 | 6                                 | \$19,285,186.69          |
| 2015 | 7 (estimated)                     | \$50,968,700 (estimated) |
| 2016 | 10 (estimated)                    | \$54,063,104 (estimated) |

<http://health.hawaii.gov/wastewater/home/cwsrf/>





# Drinking Water State Revolving Fund



Waikamoi Flume Repair/Replacement  
Upper Kula Water System, Maui  
\$8,362,760 DWSRF project

[http://health.hawaii.gov/sdwb/  
drinking-water-state-revolving-  
fund/](http://health.hawaii.gov/sdwb/drinking-water-state-revolving-fund/)

- \$164 million in low-interest loans provided since 1997
  - Loans are provided to Hawaii's 4 Counties for drinking water infrastructure projects
- Total Loan Rates of 1-2% continue to be offered on a tiered loan rate structure.

| SFY  | # Final Loans Agreements Executed | \$ Committed              |
|------|-----------------------------------|---------------------------|
| 2012 | 5                                 | 5,856,911.00              |
| 2013 | 10                                | 27,692,905.65             |
| 2014 | 10                                | 32,924,850.00             |
| 2015 | 8                                 | 48,638,387.31             |
| 2016 | 11 (estimated)                    | 69,838,582.00 (estimated) |



# Challenges

Intra-agency  
collaboration

Inter-agency  
collaboration

Funding  
Issues

Climate  
Change



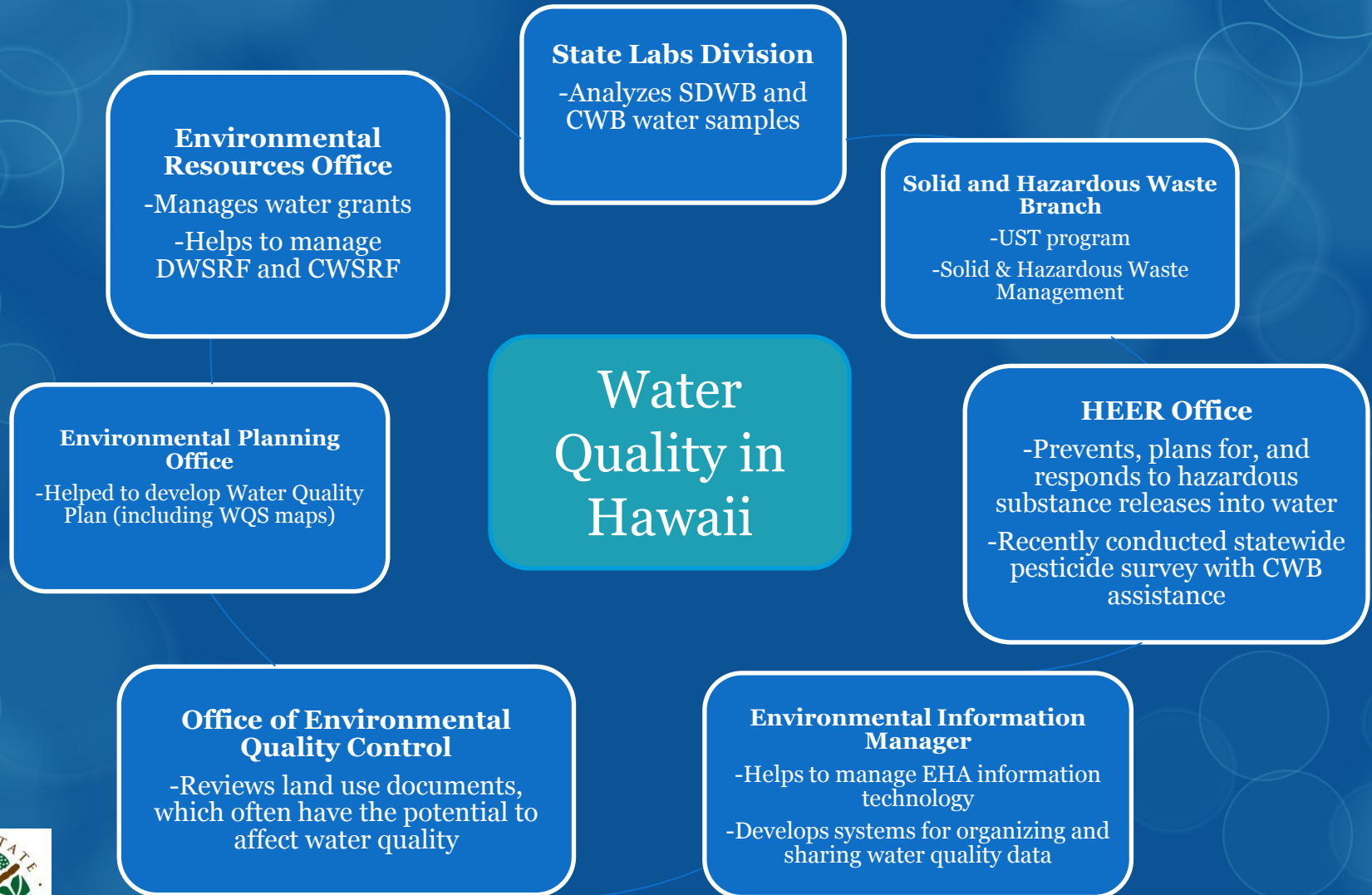
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# Other DOH Water Quality Work



# Water Quality Maps



DOH's Clean Water Branch and Environmental Planning Office eGIS program also updated the State water quality maps.

These are included in Section VII of the Water Quality Plan.

<http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/water-quality-standards/>



# Schedule for DOH Water Quality Plan Update

## Internal DOH Planning Meetings

- **October 2013 - March 2014**

## Government Agency Planning Meetings

- **March - September 2014** - including a session at the 2nd Annual Joint Government Water Conference (August 2014)
- **July 2014** – Preliminary draft for agency review
- **July 21, 2014** - Agency comments due

## Public Meetings

- **August 4, 2014** - Draft Water Quality Plan
- **September 16, 2014** - Public Information Meeting
- **October 17, 2014** - Public Comments due

## Final Collaboration with Government Agencies and Public

- **June 2015 - March 2016:** Revise/update per public and agency comments. Presentation at 3<sup>rd</sup> Annual Joint Government Water Conference (August 2015)
- **Spring 2016:** Final Water Quality Plan





- Review the Draft Water Quality Plan at:  
<http://health.hawaii.gov/water/>
- Please email your comments on the Draft Plan to: [WQPComments@doh.hawaii.gov](mailto:WQPComments@doh.hawaii.gov)



For more information on the Draft Plan or  
DOH's Water Quality work, please contact:

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